Amendments to the Specification

Please replace in the specification, the paragraph from page 7, lines 7-8, with the following paragraph:

~~Figure 4 illustrates~~ Figures 4A-4C illustrate channel re-ordering according to at least one embodiment of the invention.

Please replace in the specification, the paragraph from page 10, lines 1-20, with the following paragraph:

Figure 3 is a flowchart of adjusting color values for image processing according to at least one embodiment of the invention. According to block 310, a pixel type is chosen that includes the Alpha channel. One such pixel type, defined as v408 (in Apple Computer's QuickTime 4.1.1 and later) (QuickTime is a registered trademark of Apple Computer, Inc.), which has Alpha, Y, Cr and Cb channels, is used in the various embodiments of the invention but is enhanced in a number of ways. The v408 pixel type has a particular channel order which has been defined to take advantage of certain common computing architectures. The ordering of channels in v408 pixels is CbYCrA, which due to byte swapping considerations, works effectively in certain environments. However, it does not correlate well with RGB image buffers, which often have the Alpha channel first. Therefore, the channels are reordered to emulate an RGB buffer when defining the new pixel type according to the invention (block 320). This allows ~~may~~ many non-color specific image processing algorithms, such as pixel sampling, to run without alteration and directly on YCrCb image data without having to first convert the image data to RGB. This is detailed in ~~Figure 4~~ Figures 4A through 4C and further described below.

Please replace in the specification, the paragraph from page 12, lines 4-21, with the following paragraph:

~~Figure 4 illustrates~~ Figures 4A through 4C illustrate channel re-ordering according to at least one embodiment of the invention. The order of channels refers to how the bits of the data representing each channel is sequenced, and thus how this data is addressed in memory buffers. Memory buffers are physically available, for example, in video display adapter cards which render image data onto monitors in a computer system. Other image buffers may be artificially created in the memory of a display adapter or as a partition of main memory in a computer system. Typically, these buffers expect pixel data to be of a particular format (such as RGB) and the individual channels arranged in a particular order. For instance, pixel 410, depicted in ~~Figure~~ 4 Figure 4A is typical of the channel order expected by most image buffers when it receives image data and writes out image data (after image processing). In pixel 410, eight bits (one byte) of Alpha (A) information is followed consecutively by one byte of Red (R) information, one byte of Green (G) information and finally, one byte of Blue (B) information.

Please replace in the specification, the paragraph from page 16, lines 3-20, with the following paragraph:

To map the values of the recovered Y channel into Y values suitable for the image space defined by the invention, a value of 16 is subtracted from the Y channel (block 550). Ordinarily, in accordance with industry standards, the stored Y channel (and thus, the recovered Y channel data) has values that range from 16 to 235. After subtracting 16 from the Y channel, the new range of Y channel values will be 0 to 219. This allows "black" to correspond to zero in both RGB and the new color spaces. Additionally, by placing black at zero, computation is made less

burdensome than when dealing with black at a value of 16. Also, while the recommended range for most video is a Y value of 235, many values in the "headroom", with Y values of 236 through 254 are recorded on the media. By overexposing, image capture devices sometimes capture and record values of Y in the headroom. By using the newly defined color space, these headroom values can be preserved since 16 is later added on to the top values of Y as well. As a result, no brightness is lost ~~form~~ from the original image, and no luma clamping occurs.